

**Abstract**

Novel copolymers suitable for forming the top layer photoimagable coating in  
5 a deep UV, particularly a 193nm and 248 nm, bilayer resist system providing high  
resolution photolithography. Chemically amplified photoresist composition and  
organosilicon moieties suitable for use in the binder resin for photoimagable etching  
resistant photoresist composition that is suitable as a material for use in ArF and KrF  
10 photolithography using the novel copolymers.